TOPIC: Home Safety Survey

LEVEL OF INSTRUCTION: Interactive Lecture

TIME REQUIRED: Two To Three Hours

MATERIALS: NFPA Home Safety Survey Form
            Projector with screen
            Computer
            White Board with markers and eraser
            Smoke Detector
            Release form
            Data collection sheet
            Home safety handouts that will be given to residents
            Contact information for other organizations, such as Red Cross, Social Services

REFERENCES:

    National Fire Protection Standard 1001 (Fire Fighter II)
    National Fire Protection Standard 1045
    National Fallen Firefighters Foundation Life Safety Initiative #3: Risk Management
    National Fallen Firefighters Foundation Life Safety Initiative #8: Technology
    National Fallen Firefighters Foundation Life Safety Initiative #14: Public Education
    National Fallen Firefighters Foundation Life Safety Initiative #15: Code Enforcement and Sprinklers

    www.homefiresprinkler.org

PREPARATION: Review organizational policy and plans for home safety surveys

            Arrange for home safety survey practical activity to be done as culminating project

MOTIVATION: Home safety surveys have been identified by the US Fire Administration, National Fire Protection Administration, and the National Fallen Fire Fighters Foundation as critical activities for fire service organizations to reduce the threat of death and injury with the community and fire service. Communities that conduct regular, home safety surveys have 50% fewer fires than similar communities that do not participate. In addition, conducting home safety surveys provides fire departments with additional benefits, including:
Providing value added service to the community
Direct community involvement
Quick action alert capabilities through early recognition and response to threats
Improved community health and safety outcomes
Improved community familiarity
Improved driver capabilities
Providing professional growth opportunities for responders
Providing opportunities for partnerships and collaboration within the community

**OBJECTIVE (SPO):** At the conclusion of training, and utilizing the NFPA Home Safety Survey Form, the participant will conduct a home safety survey, IAW NFPA 1001 (fire fighter II) and NFPA 1045 to identify, communicate, and correct unsafe conditions in the home.

**OVERVIEW:** This drill is designed to provide participants with the job-skills related to conducting home safety surveys, including, identifying hazards in the home, assessing the serviceability of smoke alarms, and smoke alarm installation.

**TASK:** Conduct a home safety survey and recommend corrective actions for unsafe conditions.

**SPO:** At the conclusion of training, and utilizing the NFPA Home Safety Survey Form, the participant will conduct a home safety survey, IAW NFPA 1001 (fire fighter II) and NFPA 1045 to identify, communicate, and correct unsafe conditions in the home.

**EO1** Identify common hazards in the home

**EO2** Describe the hazards associated with:

- Careless use of candles, smoking materials, matches or other open flame devices,
- Use and misuse of common household chemicals
- Fall and trip threats
- Scald risks in the kitchen and bath
- Radon
- Electrical cord use and misuse
- Flammable liquids
- Heating systems
- Cooking appliances and ventilation systems
- Housekeeping and rubbish storage and disposal
- Blocked or inaccessible escape routes

**EO3** Describe the selection, use of, inspection, and storage of fire extinguishers

**EO4** Describe the selection, use, maintenance and inspection of smoke alarms

**EO5** Perform a smoke alarm inspection, including replacing batteries and needed.

**EO6** Install smoke alarms in a residential structure
Communicate the benefits of residential fire sprinklers

Describe and communicate the hazards and risk reduction activities in the Wildland/Urban Interface, including:

- Maintaining a survivable space
- Installing non-combustible roofs
- Maintaining roof and gutter free from debris
- Installing high-moisture, low flammability plants near dwellings
- Placing ¾ inch mesh metal screens over foundation and eave vents
- Enclosing sides of silt foundations and decks to prevent intrusion of firebrands
- Providing metal screens or spark arrester on chimneys
- Providing access to emergency water supply

Describe and communicate all-hazards safety information, including:

- Weather hazards common in the area
- Firearms safety
- Drowning prevention
- Falls
- Choking, suffocation, and strangulation
- Poisoning

Identify organizations that can provide assistance to homeowners to correct identified hazards.

Complete documentation associated with home safety survey and communicate results to homeowner.

Utilize information from home safety survey to develop a community risk profile.

I. Why conduct home safety surveys
   A. ICMA links a 10% increase in CRR activities with a 10% decrease in loss and studies suggest that home safety surveys may lead to a reduction in fire loss by up to 50% in the community.
   B. The fire service needs to be a valued service to the community and expand beyond its traditional response role in order to better serve the community, reduce costs, and improve responder safety.
   C. Discuss the cost of a home fire.

   Example:
   - Home lost $150,000
   - Contents lost $75,000
   - Work productivity lost: 10 days at $300 = $3,000
Fire apparatus (3 engines, 1 truck, 1 ambulance x 3 hours) = ($175 x 3 x 3) + $225 x 3 + $175 x 3 = $1,575 + $675 + $525 = $2,475
Equipment = $2,400
Water supply = $750
Non-direct costs 10%
Total cost = $254,347.75

II. Identify and describe common hazards in the home (EO 1 and 2)

a. Careless use of candles, smoking materials, matches or other open flame devices
   i. Accidental fire hazard
b. Use and misuse of common household chemicals
   i. Accidental poisoning
   ii. Mixing of chemicals
   iii. Hazards associated with chemical (i.e. flammability, toxicity)
c. Fall and trip threats
   i. Secondary injury
d. Scald risks in the kitchen and bath
e. Radon
f. Electrical cord use and misuse
   i. Fires
   ii. Trip hazards
g. Flammable liquids
h. Heating systems
   i. Fire
   ii. Carbon monoxide
   iii. Burns
i. Cooking appliances and ventilation systems
   i. Fires
   ii. Trip and fall due to grease build up
   iii. Burns
j. Housekeeping and rubbish storage and disposal
   i. Fire and burn
k. Blocked or inaccessible escape routes

III. Type, use and storage of fire extinguishers (EO 3)

a. Classes of fire and corresponding extinguishing agents
   i. A
   ii. B
   iii. C
   iv. D
   v. K
b. Maintenance
   i. Cleaning
   ii. Age
   iii. Inspecting
c. Storage
   i. Accessibility
ii. Location
iii. Proximity to exit

IV. Smoke Alarms (EO 4, 5, and 6)
   a. Types
      i. Ionizing
         1. Uses radioactive component to charge smoke
      ii. Photo-electric
         1. Sees smoke with “eye”
   b. Best type
      i. One that works
   c. Age and maintenance
      i. Good for 10 years
      ii. Change batteries (if appropriate) twice per year with a fresh battery
      iii. Test monthly
      iv. Clean (vacuum/dust) regularly
   d. Where to place
      i. Every floor
      ii. Outside of sleeping areas
      iii. No more than 12” from the ceiling
      iv. Away from walls
      v. No closer than 10’ from cooking areas
      vi. Away from ventilation systems

V. Benefits of residential sprinkler systems (EO 7)
   a. Effective
   b. Efficient
   c. Life safety

VI. WUI hazards (EO 8)
   a. Maintaining a survivable space
   b. Installing non-combustible roofs
   c. Maintaining roof and gutter free from debris
   d. Installing high-moisture, low flammability plants near dwellings
   e. Placing ¼ inch mesh metal screens over foundation and eve vents
   f. Enclosing sides of silt foundations and decks to prevent intrusion of firebrands
   g. Providing metal screens or spark arrester on chimneys
   h. Providing access to emergency water supply

VII. Organizations that can help (locally developed) (EO 10)
   a. Owner overwhelmed by tasks
   b. NGO’s (local)
   c. Faith-based groups
   d. Government
   e. Commercial

VIII. Safety survey form and risk profile (EO 11 and 12)
a. NFPA safety survey form provides a template for conducting survey
b. Should be left with homeowner and results and solutions discussed
c. Develop an action plan for the owner
d. Provide assistance as appropriate
e. Information that needs to be captured
   i. Location
   ii. Hazards found
   iii. Hazards addressed

IX. Final Activity
   a. Perform a home safety survey
   b. Identify hazards
   c. Correct hazards when possible
   d. Make recommendations
   e. Document hazards
   f. Communicate with homeowner

REMOTIVATION: The ability to reduce hazards provides responders the opportunity to become familiar with their communities, provide value-added services, and reduce the risk throughout their organizations and communities. By actively engaging community members in the location of highest rate of injury, responders can dramatically impact the injury, fire, and death by injury rates in their communities, strengthen community bonds, and improve responder health and safety.